What's in It for Me?

An Intervention to Increase Physical Activity Among Adolescents in Physical Education

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Do your students map their goals? Do they employ P3 thinking? Do they lack motivation?

sk a physical educator to compare the physical activity levels of elementary children to high school adolescents, and she will likely explain that the difference is remarkable. Younger children are typically much more active throughout the day than older adolescents. In fact, research has shown that there is a decrease in the amount of physical activity among children as they age (Sallis, 1993). As a result, some adolescents are becoming unhealthy and overweight, which leads to even less motivation to participate in physical activity. The only physical activity or exercise that most adolescents are exposed to during the day is their physical education class in high school. When the physical education program is effective and adolescents are active, it is possible to observe changes in physical fitness indicators, overall health, and academic performance in school (AAHPERD, 1999). The problem is that some states require students to enroll in physical education for only one semester, and when the class ends, the students typically stop their physical activity and all benefits are lost. Therefore, without the needed self-motivation, students discontinue their daily activity and their lifestyle becomes too sedentary.

How can educators persuade their students to maintain an active lifestyle? In most cases, physical education teachers are not equipped with the knowledge of how to provide motivational interventions that encourage students to continue to be physically active after and outside of their classes. In the sport psychology literature, there are many types of motivational interventions that can easily be transferred from a sport context to an educational setting. In addition, numerous studies provide evidence that motivational interventions do work with adolescents (Carron, Hausenblas, & Estabrooks, 2003). Unfortunately, at the school level, physical education and sport psychology rarely come together for a common goal, such as maintaining the desire to be active and physically fit. The purpose of this article is to present two intervention strategies that have been used in high school physical education classes to motivate students to be more physically active during and beyond their experience in class.

Review of the physical activity literature suggests a need to identify critical psychosocial mediators of physical activity behavior change in adolescents (Lewis, Marcus, & Pate, 2002). Personal investment theory provides a useful conceptual framework to study the physical activity behavior of adolescents, because the meaning, or sub-jective experience, of physical activity plays a significant role in determining activity choices and continued motivation to be active (Maehr & Braskamp, 1986). Using this theory as

a guide, educators can address what makes physical activity meaningful for adolescents and thus provide an effective intervention during physical education.

Adolescents want to know, "What's in it for me?" or how will this experience be meaningful? Personal investment theory indicates that critical psychosocial characteristics related to motivated behavior are sense of self, personal incentives, and perceived opportunities (Maehr & Braskamp, 1986). Research has shown that when people feel better about themselves, see the benefits, and understand the opportunities for improvement, their behavior will change (Maehr & Braskamp). Therefore, these three characteristics (sense of self, personal incentives, and perceived opportunities) can serve as the guide to answer why and how students should be physically active. The intervention strategies specifically include "goal mapping" and "P3 thinking" (Vealey, 2005). These techniques aim to help students develop a positive sense of self, recognize the personal goals that can be achieved through physical activity, and to increase their opportunity to be active during and beyond physical education.

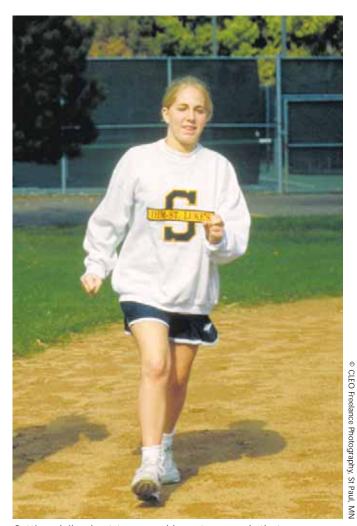
The Physical Education Intervention

In a typical physical education curriculum, many high schools are including a classroom component as part of their class. Teachers may include lectures, textbook readings, and discussions as part of the learning experience. In these situations, classroom time can easily be used to initiate the specific intervention for goal mapping and P3 thinking so students can gain an understanding of their purpose and overall benefit. Once these are introduced to the students, then the interventions should be incorporated into the daily lesson plans of the physical education class (e.g., talk about them daily, ask questions, use examples in class). For example, students could be assigned alternative assessments or homework that encourages the application of these interventions. If the curriculum does not include classroom experiences, the physical education teacher can still implement these strategies in the gymnasium, using time at the beginning of class before activity begins. The following sections describe each intervention with information the physical educator can use to describe the technique to his class. Two figures provide examples of worksheets or handouts associated with each intervention.

Goal Mapping

The purpose of the goal-mapping intervention is to introduce students to an effective way of developing and logging individual progress toward physical activity goals. Goal mapping allows students to set goals and better evaluate and adjust them accordingly. Students typically set goals that are vague and difficult to assess. To overcome this problem, SMAART goals should be taught to assist students in creating goals that are specific, measurable, aggressive yet attainable, relevant to their physical activity class, and time bound (Vealey, 2005).

There are many benefits associated with goal mapping. By



Setting daily, short-term, and long-term goals that are challenging and specific will help students maintain an active lifestyle.

setting challenging and specific goals, performance may be enhanced more than by just asking students to set general goals such as "to do your best" or "give 100 percent." For example, the teacher could ask a student to provide an example of a goal that he or she has set recently, then ask when and how this goal was reached. Unless the goal was specific, the student will not know whether it has been achieved. Specific goals allow students to easily log and evaluate progress, thus helping students stay focused and motivated. Students should set long-term goals that are achievable over time (e.g., six months or longer), short-term goals that are achievable in a shorter amount of time (e.g., 2 to 4 weeks), and daily goals that are completed each day. As students complete their daily goals, they will begin to see progress toward achievement of short-term goals and eventually of their long-term goal. Both daily and short-term goals are important motivators to continue work toward the bigger goals. When obstacles or setbacks occur, goal maps can increase students' persistence in the face of these obstacles and keep them on the right track to optimal performance and health.

Implementation. Goal mapping should be introduced

Figure 1. Example of a Goal Map Name __ Class Period My Goal-Mapping Log **Daily Goal** Run for at least 10 minutes without stopping **Short-Term Goal** Run for 1.5 miles without stopping **Long-Term Goal** Run 3 miles without stopping **Daily Goal** Do 30 crunches each morning **Short-Term Goal** 50 crunches in a row without a rest **Daily Goal** Stretch for 10 minutes **Progress Log** (check if daily goal met) + = achieved - = not achieved My Daily Goals Monday Tuesday Wednesday Thursday **Friday Saturday** Sunday 1. Run for at least 10 minutes without stopping 2. Do 30 crunches each morning 3. Stretch for 10 minutes

by discussing the benefits and characteristics of SMAART goals. Next the teacher should use examples of long-term and short-term goals from students that are specific to their physical activity or fitness class. In this way the teacher can help students recognize the difference between short-term and long-term goals. Then, teachers can introduce the goal maps as a way for students to write out their specific goals. Students should set one long-term goal that is specific to their physical activity or fitness level. Two short-term goals are then developed to assist the students in reaching their long-term goal. Then teachers can encourage students to establish three daily goals that would assist them in achieving their short-term goals. Students should keep a daily log to track the progress toward their short-term goals and eventual achievement of their long-term goal. Teachers can

ask students to evaluate their goal maps weekly at the end of class, in order to make necessary adjustments to any of their goals. If students are having difficulty with a particular goal, they should rewrite the goal. It has been the authors' experience that not all students will enjoy the paperwork involved with goal mapping, but other students will like the idea of keeping a written report and seeing their progress. Figure 1 provides an example of a goal map. Teachers should give students a copy of an example and then a blank goal map they can complete on a weekly basis.

P3 Thinking

Although individuals might have the physical ability to perform well, they are often limited by how they think (Vealey, 2005). Sport psychology research shows that suc-

Figure 2. P3 Thinking Worksheet

- 1. Think carefully about thoughts and feelings that you associate with GOOD physical activity experiences. What thoughts and feelings prepare and enable you to perform well and remain focused and confident during physical activity?
- 2. Now, think carefully about thoughts and feelings that you associate with POOR physical activity experiences. What thoughts and feelings do you have when you are performing poorly or feeling less confident and focused during physical activity?
- 3. Identify any situations or things that happen to you while being physically active that trigger you to have self-defeating thoughts or feelings.

Specific things that happen to me	What I think (self-defeating thoughts)	How it makes me feel or how it hurts my performance
a.		
b.		
c.		

4. In the previous exercise, you identified self-defeating thoughts that occur in physical activity situations. Your task now is to plan the P3 thoughts that you will use to immediately replace the self-defeating thoughts when they occur.

Tip: your replacement thoughts must be believable—don't just go through the motions. Write down what you can actually say that you believe and that has meaning for you in that situation.

Specific things that happen to me (replacement P3 thought)	How I can think better feelings and performance	How this will enhance my
a.		
b.		
c.		

5. When your old self-defeating thoughts come back at times in physical activity, remind yourself that you knew they could, but immediately choose to think about your planned replacement thoughts. Keep it simple: make your thoughts short, easy to remember, and focused on what you have to do at that moment.

cessful athletes think more effectively than less successful athletes (Gould, Dieffenbach, & Moffett, 2002). Specifically, in comparison with less successful athletes, successful athletes focus on task-relevant thoughts, avoid distraction more often, and manage anxiety better. A mental-training tool that teachers can use to help students become a better thinker in physical activity situations is P3 thinking. The P3 acronym refers to thoughts that are purposeful, productive, and focused on possibility (Vealey, 2005). Purposeful thoughts are intentional and deliberate, rather than random. Productive thoughts are rational and helpful, rather than reactive.

Finally, possibility thoughts are unrestricted by limitations, rather than restrictive.

Students who learn to practice P3 thinking will be less likely to focus on negative thoughts, and more likely to think in ways that make physical activity an enjoyable experience. Thinking "on purpose" means taking control of thoughts and directing them to pump someone up, boost confidence, or maintain focus during a workout or activity. Rather than react negatively, P3 thinkers are able to respond well to difficult situations. By thinking productively, students manage the situation rather than letting it manage them. Productive

Table 1. Example of P3 Thinking Versus Self-Defeating Thinking

Example: My friend and I were going to play basketball, but he called and said he couldn't come.

P3 Thinking

Purposeful

I can find another friend to play with, or work on my jump shot.

Productive

Focus on having a good time playing, regardless of whether I'm by myself or not.

Possibility

It might be fun to shoot around by myself. I might improve for the next time we play.

Self-Defeating Thinking

Random

What am I going to do now?

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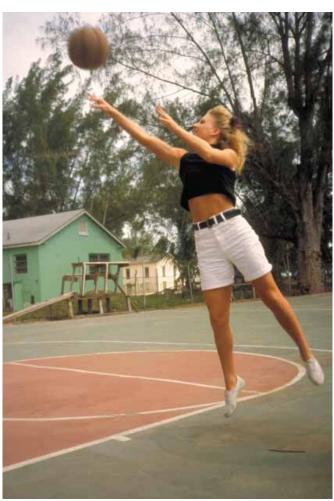
Reactive

I can't stand it when he cancels on me!

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Restrictive

I can't play without him!



Shooting baskets alone might be lonely, but P3 thinking—which is purposeful, productive, and focused on possibility—can turn it into a positive experience.

thinkers take a bad workout or an activity that they usually dislike, and think in ways that allow them to overcome these barriers and see the benefits that can come from being physically active. Thinking about what they can achieve and how they can improve themselves through physical activity might keep students motivated to stay physically active.

Implementation. Changing how students think about a workout or physical activity is tough because most thoughts are automatic. Just like any skill, becoming a P3 thinker takes time and practice. The first step is to discuss P3 thinking and have students complete the worksheet in figure 2. This will give students the chance to identify typical thoughts that they have and to replace self-defeating thoughts with thoughts that are purposeful, productive, and focused on possibility. When students lose focus or have a bad workout, it is often because of poor thinking. Self-defeating thoughts in physical activity come from random, reactive, and restrictive thinking. Teachers should discuss these main points first.

When students have completed the worksheet in figure 2, they should put it in a place where they can see it as a reminder of how they want to think in difficult situations. The worksheet also includes some tips on how to become a better thinker. One of these is to mentally practice thinking P3 thoughts. Ask students to take a few minutes each day to imagine themselves thinking purposefully and productively about the possibilities in physical activity situations. Teachers can use the example in table 1 to illustrate and discuss the differences in how people use P3 thinking and self-defeating formulas.

It is also helpful to develop an affirmation statement. Affirmations are short, positive statements phrased in the present and repeated over and over to influence the subconscious mind (Vealey, 2005). For example, an affirmation to help students improve P3 thinking about weight training might be, "I am strong and powerful." Placing a simple dot sticker on an object they frequently look at (e.g., a mirror or cell phone) will remind students to repeat their affirmation statement to themselves every time they see the dot.

Conclusion

A critical responsibility of physical education is to teach adolescents how and why they should be physically active throughout life. Sometimes the benefits of a longer, healthier life without terrible diseases (e.g., diabetes, heart attack, high cholesterol) are too far removed for a teenager to relate to on a daily basis. They want to know "why me, why now, what's in it for me today."

Goal mapping and P3 thinking provide several suggestions for addressing these motivational issues because they happen on a daily basis and can produce immediate results. Physical educators can help students to develop a positive sense of self by encouraging students to achieve set goals and to use thoughts that are purposeful, productive, and focused on possibility. Students can recognize the personal incentives and opportunities that can be achieved through physical activity by goal mapping what is important to them and making a clear plan to achieve daily, short-term, and long-term goals in physical education class and after.

The authors' experience in implementing these interventions in a high school Fit for Life physical education class was positive. Not all students saw a benefit to the interventions or "bought into" trying them, just as not all students appreciate all instructional strategies. However, some students, especially in elective physical education classes, did use the interventions daily and reported applying them to other aspects of their lives. For these students, both of these interventions made physical activity more meaningful during physical education class and beyond.

References

- AAHPERD. (1999). *Physical Best activity guide: Elementary level*. Champaign, IL, Human Kinetics.
- Carron, A. V., Hausenblas, H. A., & Estabrooks, P. A. (2003). *The psychology of physical activity.* Boston: McGraw-Hill.
- Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological characteristics and their development in Olympic champions. *Journal of Applied Sport Psychology*, 14, 172-204.
- Lewis, B. A., Marcus, B. S., & Pate, R. R. (2002). Psychological mediators of physical behavior among adults and children. *American Journal of Preventive Medicine*, *23*, S26-S35.
- Maehr, M. L., & Braskamp, L. A. (1986). *The motivation factor: A theory of personal investment*. Lexington, MA: Lexington Books.
- Sallis, J. F. (1993). Epidemiology of physical activity and fitness in children and adolescents. *Critical Review of Food Science and Nutrition*, 33, 403-408.
- Vealey, R. S. (2005). *Coaching for the inner edge.* Morgantown, WV: Fitness Information Technology.

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psychomotor, cognitive, and affective unit goals and objectives. Here, the physical educator reflects on the effectiveness of his or her instruction and the physical education program's overall contribution to guiding students toward meeting the national standards.

Driving Home

Our two buses are approaching Pat and Alex. Which bus will drive its riders toward achieving the national standards for physical education: the bus based on an uncoordinated, continually expanding list of activities, or the movement-framework bus?

References

- Baumgarten, S., & Langton, T. (2006). Elementary physical education:

 Building a solid movement foundation. Champaign, IL: Stipes.
- Butler, J., Griffin, L., Lombardo, B., & Nastasi, R. (Eds.). (2003). *Teaching games for understanding in physical education and sport*. Reston, VA: National Association for Sport and Physical Education.
- Collins, J. C. (2001). Good to great. New York: Harper Collins.
- Collins, J. C., & Porras, J. I. (1997). Built to last: Successful habits of visionary companies. New York: Harper Business.
- Dewey, J. (1938). Experience and education. New York: Touchstone.
- Graham, G., Holt Hale, S. A., & Parker, M. (2001). *Children moving: A reflective approach to teaching physical education*. Mountain View, CA: Mayfield.
- Logsdon, B., Barrett, K., Ammons, M., Broer, M., Halverson, L., McGee, R., & Robertson, M. (1984). *Physical education for children: A focus on the teaching process.* Philadelphia: Lea & Febiger.
- Mauldon, E., & Redfern, B. (1981). Games teaching: An approach for the primary school. Boston: Plays.
- McTighe, J., & O'Connor, K. (2005). Seven practices for effective teaching. Educational Leadership, 63(3), 10-17.
- National Association for Sport and Physical Education. (2000). Appropriate practices for elementary school physical education.. Reston,
- National Association for Sport and Physical Education. (2004). Moving into the future: National standards for physical education (2nd ed.). Reston, VA: Author.
- North, M. (1973). Movement education. London: Temple Smith.
- Placek, J. H. (1983). Conceptions of success in teaching: Busy, happy, and good? In T. J. Templin & J. K. Olson (Eds.), *Teaching in physical education* (pp. 46-56). Champaign IL: Human Kinetics.
- Preston-Dunlop, V. (1980). A handbook for modern educational dance.

 Boston: Plays.
- Rink, J. E. (1998). Teaching physical education for learning. Boston:

 McGraw-Hill.
- Stanley, S. (1969). *Physical education: A movement orientation*. Toronto: McGraw Hill.
- Thorpe, R., Bunker, D., & Almond, L. (1986). Rethinking games teaching. Loughborough, England: Loughborough University of Technology. Tyler, R. W. (1949). Basic principles of curriculum and instruction. Chicago:

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